

GK_{HH} series

PC Board Mounting Type



Anti-Solvent Feature
(Through 100V only)

- Higher C/V products.
- Plentiful line-up from $\phi 35 \times 63$ to $\phi 40 \times 100$ mm.
- Auxiliary terminals provided to assure anti-vibration performance.
- Adapted to the RoHS directive (2002/95/EC).

GK_{HH} ← High C/V GU

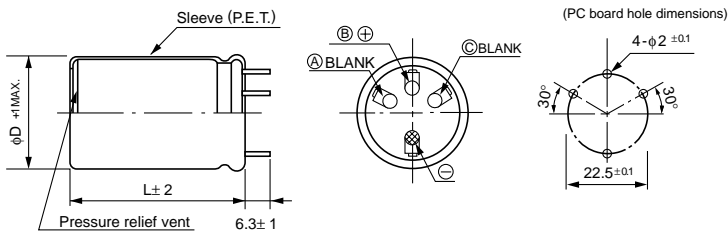


Specifications

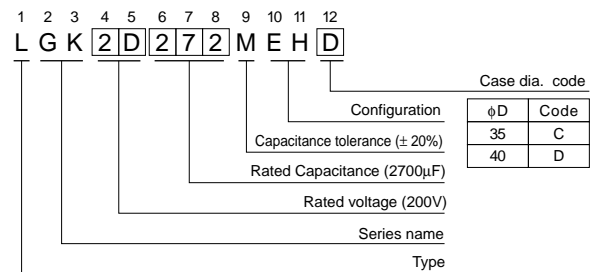
Item	Performance Characteristics											
Category Temperature Range	- 40 ~ +105°C (16 ~ 250V), - 25 ~ +105°C (400V)											
Rated Voltage Range	16 ~ 400V											
Rated Capacitance Range	560 ~ 68000 μ F											
Capacitance Tolerance	$\pm 20\%$ at 120Hz, 20°C											
Leakage Current	$I \leq 3\sqrt{CV}$ (μ A) (After 5 minutes' application of rated voltage) [C : Rated Capacitance (μ F) V : Voltage (V)]											
tan δ	Measurement frequency : 120Hz, Temperature : 20°C											
	Rated voltage(V)	16	25	35	50	63	80	100	160	200	250	400
	tan δ (MAX.)	0.60	0.50	0.40	0.35	0.30	0.30	0.25	0.20	0.15	0.15	0.30
Stability at Low Temperature	Measurement frequency : 120Hz											
	Rated voltage(V)		16 ~ 250				400					
	Impedance ratio	Z _{-25°C} /Z _{+20°C}		4		8						
	Z _T /Z ₂₀ (MAX.)	Z _{-40°C} /Z _{+20°C}		15		—						
Endurance	After an application of DC voltage (in the range of rated DC voltage even after over-lapping the specified ripple current) for 2000 hours at 105°C, capacitors meet the characteristic requirements listed at right.											
	Capacitance change	Within $\pm 20\%$ of initial value										
	tan δ	200% or less of initial specified value										
Shelf Life	After storing the capacitors under no load at 105°C for 1000 hours, and after performing voltage treatment based on JIS C 5101-4 clause 4.1 at 20°C, they will meet the requirements listed at right.											
	Capacitance change	Within $\pm 15\%$ of initial value										
	tan δ	150% or less of initial specified value										
Marking	Printed with white color letter on black sleeve.											
	Leakage current	Initial specified value or less										

Drawing

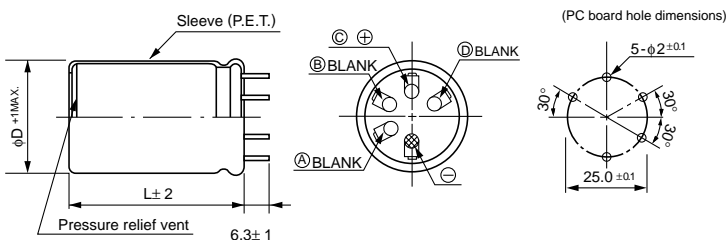
- For all of $\phi 35$ mm products and for 63mmL or shorter with $\phi 40$ mm.



Type numbering system (Example : 200V 2700 μ F)



- For 63mmL or longer with $\phi 40$ mm.



Notes:
As blank terminals are not insulated from capacitor element, they shall be mounted on independent lands.

Frequency coefficient of rated ripple current

Frequency (Hz)	50	60	120	1 k	10k~
Coeff.	16 ~ 100V	0.88	0.90	1.00	1.15
	160 ~ 250V	0.85	0.88	1.00	1.15
	400V	0.88	0.90	1.00	1.10

Minimum order quantity : 50pcs.

- Dimension table in next page.

■ Dimensions

V(Code)		16V (1C)		25V (1E)		35V (1V)		50V (1H)	
Cap.(μF)	Code	35	40	35	40	35	40	35	40
18000	183							35×68	40×63
								5.55	5.80
22000	223					35×63	40×50	35×80	40×63
						5.10	5.00	6.35	6.15
27000	273					35×68	40×63		
						5.50	5.80		
33000	333			35×63	40×50	35×80	40×63		
				5.60	5.50	6.25	6.05		
39000	393			35×68	40×63				
				6.00	6.30				
47000	473	35×63	40×50	35×80	40×63				
		5.90	5.75	6.80	6.60				
56000	563	35×68	40×63						
		6.20	6.45						
68000	683	35×80	40×63						
		6.90	6.70						

V(Code)		63V (1J)		80V (1K)		100V (2A)	
Cap.(μF)	Code	35	40	35	40	35	40
5600	562					35×68	40×63
						4.40	4.55
6800	682					35×80	40×63
						4.80	4.65
8200	822			35×63	40×50		
				4.75	4.65		
10000	103			35×80	40×63		
				5.45	5.00		
12000	123	35×63	40×50				
		5.35	5.25				
15000	153	35×68	40×63				
		5.85	6.10				

V(Code)		160V (2C)		200V (2D)		250V (2E)		400V (2G)	
Cap.(μF)	Code	35	40	35	40	35	40	35	40
560	561							35×63	40×50
								1.75	1.70
680	681							35×80	40×63
								2.05	2.00
820	821							35×80	
								2.20	
1000	102							35×100	40×80
								2.65	2.60
1200	122					35×63	40×50		40×100
						2.75	2.70		3.00
1500	152					35×68	40×63		
						3.20	3.35		
1800	182			35×63	40×50	35×100	40×80		
				3.30	3.20	4.05	3.95		
2200	222	35×63	40×50	35×80	40×63	35×100	40×80		
		3.50	3.45	3.90	3.80	4.35	4.20		
2700	272	35×68	40×63	35×100	40×80		40×100		
		3.90	4.10	4.65	4.50		5.00		
3300	332	35×80	40×63		40×80				
		4.55	4.40		4.90				
3900	392	35×100	40×80		40×100				
		5.30	5.20		5.70				
4700	472		40×100						
			6.15						

Rated Ripple (Arms) at 105°C 120Hz